Environmental Scan

Summary of Codes, Regulations and Benchmarking Programs

October 2025

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

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Introduction

Carbon transition planning is a complex ecosystem with technical and regulatory opportunities and challenges, often with regional distinctions. To facilitate a better understanding of this landscape, CAGBC has prepared an assessment of codes, programs, and frameworks promoting low- or zero-carbon buildings, including but not limited to current and future high-performance building codes, certification frameworks, and government incentives. This scan aims to bring together information on the drivers already impacting transition planning and implementation. As such, it includes codes, frameworks and programs applicable to both new and existing buildings.

The urgency of decarbonizing Canada's existing building stock is driving efforts such as Nature Resources Canada's (NRCan) Codes Acceleration Fund project to identify the mechanisms that can facilitate large-scale emission reductions. Given that contemporary building codes and the legal means to enforce them are focused primarily on new buildings, this scan attempts to identify programs that promote the benchmarking, reporting and performance of existing buildings.

Codes, frameworks and programs

This environmental scan has primarily focused on the country's three largest metropolitan areas – Vancouver, Toronto and Montreal – to assess their unique needs and challenges related to carbon transition planning, energy code adoption, compliance, and enforcement. The applicable codes, frameworks and programs in these three urban centres include those administered at the federal, provincial, and municipal levels. The scan also includes some municipalities outside of the three target regions to demonstrate how energy and carbon codes, frameworks, and programs are being implemented at the municipal level. Whistler and Richmond, British Columbia, have been selected out of multiple jurisdictions implementing B.C.'s Energy Step Code and the Zero Carbon Step Code; and the Region of Peel, Ontario with its Net Zero Emissions New Construction Policy; and Markham, Ontario with its point-based system that assigns values to various sustainability metrics were included.

Among the most important considerations for the scan were the inclusion of both new and existing buildings; the accommodation of different asset classes with distinct challenges and opportunities for transitioning to zero carbon; whether the frameworks were mandatory or voluntary; and the different applicable scopes, from energy performance to operational carbon to embodied carbon. Frameworks were also assessed for their focus on benchmarking, reporting, and/or performance.

Progress to date, considerations for the future

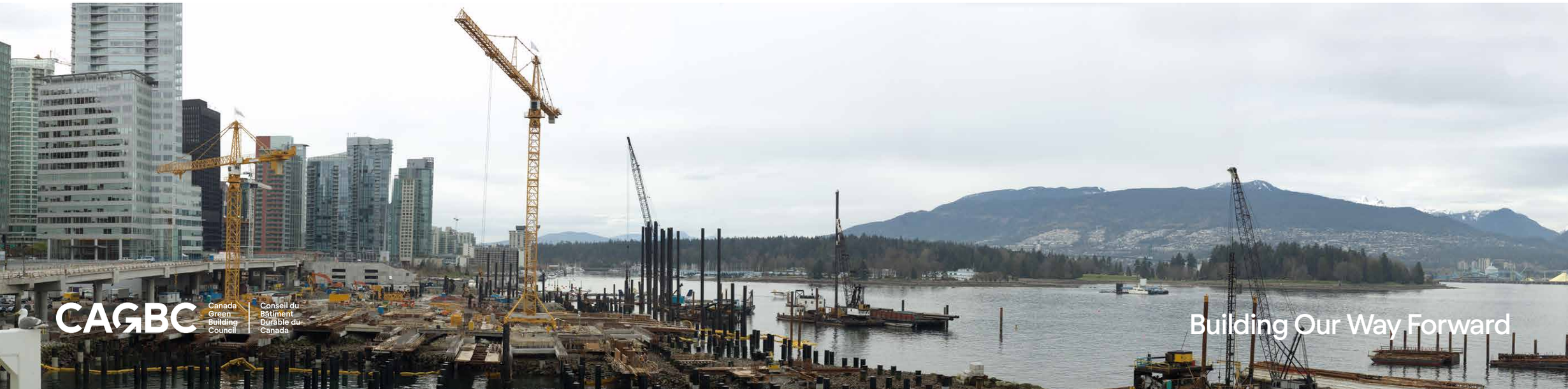
There is leadership demonstrated in the country's most rigorous codes, frameworks, and programs, particularly for new buildings; there is also clear recognition that the path towards zero carbon will need to be gradual to ensure that no building is left behind. This path looks different across Canada, with its diverse climate regions, major city centres, and smaller municipalities and towns. One of the objectives of this scan is to show how Canada could establish a decarbonization standard based on where similar municipalities and organizations are finding success and to show how increasing levels of stringency can be built on a solid foundation.

A new building designed and constructed to even the most robust of contemporary Canadian building codes will, with a high degree of certainty, need to be decarbonized at some point to meet Canada's carbon neutrality target of 2050. This new building becomes an existing building from its first day of operation. While current code focus on energy efficiency and carbon reductions in new construction is important and productive for Canada's 2050 objectives, it will not fully ensure that today's buildings are prepared for the carbon transition of the coming decades. The property owner's imperative of planning for net zero emissions buildings will also be impacted by developing trends such as regulation changes and financing conditions imposed by lenders with regards to a building's carbon footprint.

Environmental Scan of Codes, Regulations and Benchmarking Programs: Summary

In the section below, codes, regulations, and benchmarking programs have been organized from west to east, with national programs shown first. Where both provincial and municipal programs are available, provincial programs are listed first.

In the following section, a short summary of each code, regulation and benchmarking program is provided. All codes, regulations and benchmarking programs, including those for new buildings, existing buildings or both, have been numbered from west to east with national programs shown first.



Existing Buildings

Geographical Applicability
National

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Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
	Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Canada Green Buildings Strategy	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓
Greening Government Strategy: Federal Policy	Mandatory			✓	✓	✓	✓			✓		
National Adaptation Strategy and Government of Canada Adaptation Action Plan (2023)	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓
Canada's 2030 Emissions Reduction Plan (2022)	Voluntary	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Pan-Canadian Framework on Clean Growth and Climate Change (2016)	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓

* Refers to single-family home, hospitality, healthcare etc.

Building Our Way Forward

Existing Buildings

Geographical Applicability
Provincial

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Building Benchmark BC ↗	Voluntary	✓			✓	✓		✓	✓	✓	✓	✓
Ontario Energy and Water Reporting and Benchmarking (EWRB) Initiative ↗	Mandatory	✓	✓		✓			✓	✓	✓	✓	
Service New Brunswick Energy Management ↗	Mandatory for government facilities	✓	✓		✓	✓				✓		
Efficiency Nova Scotia Energy Benchmarking ↗	Voluntary	✓			✓			✓	✓	✓	✓	✓

* Refers to single-family home, hospitality, healthcare etc.

Building Our Way Forward

Geographical Applicability

Municipal

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

Existing Buildings

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Energize Vancouver - City of Vancouver Annual GHG and Energy Limits Bylaw	Mandatory		✓	✓	✓	✓		✓	✓	✓	✓	✓
City of Edmonton Building Energy Benchmarking Program	Voluntary	✓			✓	✓		✓	✓	✓	✓	✓
City of Calgary Benchmark YYC	Voluntary	✓			✓	✓		✓	✓	✓	✓	✓
City of Winnipeg Building Energy Disclosure Project	Voluntary	✓	✓		✓	✓		✓	✓	✓		
Transform TO Net Zero Strategy	Includes both mandatory and voluntary components	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
City of Toronto Net Zero Existing Buildings Strategy	Includes both mandatory and voluntary components	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
City of Toronto Building Emissions Performance Standards	Voluntary			✓		✓		✓	✓	✓	✓	✓
Montreal Roadmap for Zero-Emissions Buildings by 2040	Mandatory	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Montreal By-law, concerning GHG emission disclosures and ratings of large buildings	Mandatory	✓	✓			✓		✓	✓	✓	✓	

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New Buildings

Geographical Applicability
National

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Canada Green Buildings Strategy ↗	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓
Greening Government Strategy: Federal Policy ↗	Mandatory			✓	✓	✓	✓			✓		
National Adaptation Strategy and Government of Canada Adaptation Action Plan (2023) ↗	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓
Canada's 2030 Emissions Reduction Plan (2022) ↗	Voluntary	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Pan-Canadian Framework on Clean Growth and Climate Change (2016) ↗	Voluntary			✓	✓	✓		✓	✓	✓	✓	✓
National Building Code ↗	Mandatory			✓	✓			✓	✓	✓	✓	✓
National Energy Code ↗	Mandatory			✓	✓			✓	✓	✓	✓	✓

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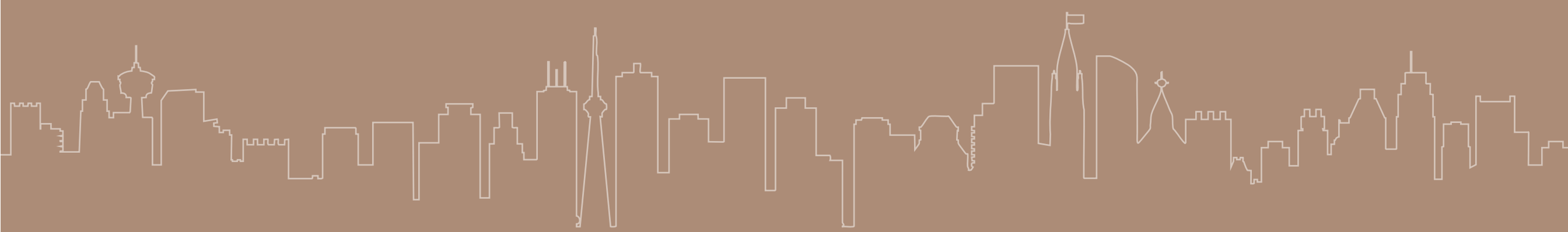
New Buildings

Geographical Applicability
Provincial

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
B.C. Energy Step Code ↗	Voluntary; some levels now mandatory in many local jurisdictions		✓	✓	✓	✓	✓	✓	✓	✓	✓
B.C. Zero Carbon Step Code ↗	Voluntary		✓	✓	✓	✓	✓	✓	✓	✓	✓
Quebec Construction Code 2020 ↗	Mandatory		✓	✓	✓		✓	✓	✓	✓	✓

* Refers to single-family home, hospitality, healthcare etc.



Building Our Way Forward

Geographical Applicability

Municipal (Large)

CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

New Buildings

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Vancouver Zero Emissions Building Plan	See 9 and 10			✓	✓	✓	✓	✓	✓	✓	✓	✓
Toronto Green Standard v4	Tier 1 (mandatory) and Tier 2-3 (voluntary)			✓	✓	✓	Tier 2 and Tier3 ✓	✓	✓	✓	✓	✓
Transform TO Net Zero Strategy	Includes both mandatory and voluntary components	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Montreal Roadmap for zero-emissions buildings by 2040	Mandatory	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Region of PEEL Net Zero Emissions New Construction Policy and Standard	Mandatory			✓	✓	✓		✓	✓	✓	✓	✓

* Refers to single-family home, hospitality, healthcare etc.

Building Our Way Forward

Geographical Applicability

Municipal (Small*)

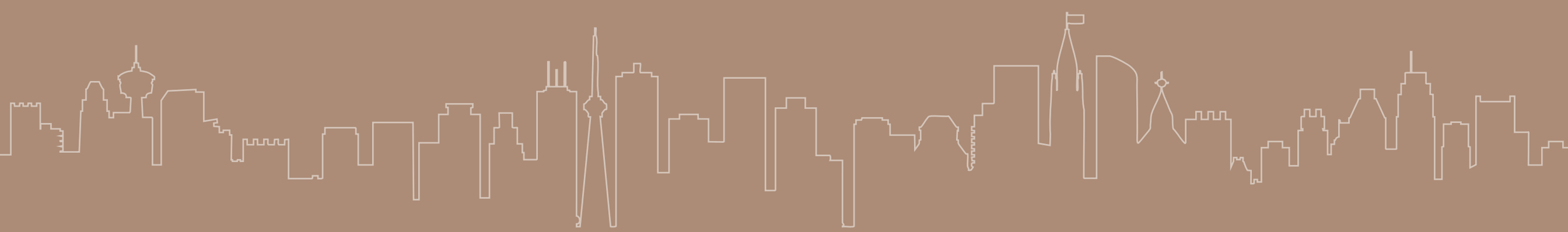
CAGBC Canada Green Building Council | Conseil du Bâtiment Durable du Canada

New Buildings

Requirement	Code/Framework Type			Applicable scope			Occupancy-specific considerations				
Voluntary/ Mandatory	Benchmarking	Reporting	Performance	Energy efficiency	Operational carbon	Embodied carbon	Commercial buildings	Industrial Retail Buildings	Institutional buildings	MURBs	Other*
Whistler, BC implementation of the Energy Step Code and Zero Carbon Step Code	Mandatory			✓	✓	✓		✓			✓	
Richmond, BC implementation of the Energy Step Code and Zero Carbon Step Code	Mandatory			✓	✓	✓		✓	✓		✓	
Markham Sustainability Metrics	Mandatory (voluntary for certain building types)			✓	✓	✓		✓	✓		✓	

* Out of multiple jurisdictions the above three small municipalities have been selected as examples.

** Refers to single-family home, hospitality, healthcare etc.



Building Our Way Forward

Summary of Codes, Regulations and Benchmarking Programs

National

Canada Green Buildings Strategy

The Canada Green Buildings Strategy (CGBS) aims to create **greener, more energy-efficient,** and **affordable homes** and buildings, focusing on reducing energy costs, **cutting carbon emissions**, and enhancing climate resilience. By transitioning to clean energy and upgrading existing infrastructure, the strategy seeks to protect Canadians from the effects of climate change while creating sustainable jobs. Collaboration across federal, provincial, municipal, Indigenous, and private sectors is crucial to achieving these goals and ensuring that new constructions meet high efficiency and performance standards.

Greening Government Strategy: Federal Policy

The Greening Government Strategy: Federal Policy establishes Canada's commitment to minimizing the federal government's environmental impact and enhancing climate resilience. This strategy aims for **net-zero emissions in federal operations by 2050**, with interim goals of reducing Scope 1 and Scope 2 greenhouse gas (GHG) emissions by 40 percent by 2025 and by at least 90 percent below 2005 levels by 2050. Embodied carbon reductions are also addressed with performance targets. The policy also includes a plan to reduce emissions by an additional 10 percent every five years starting in 2025. In addition to carbon reductions, the strategy addresses broader environmental impacts, focusing on minimizing waste, water use, and effects on biodiversity. The Strategy is a set of government-approved commitments that **apply to all core government departments and agencies.**

National Adaptation Strategy and Government of Canada Adaptation Action Plan (2023)

Canada's National Adaptation Strategy: Building Resilient Communities and a Strong Economy (NAS) provides a **long-term vision on adaptation** that will help prepare communities for the impacts of climate change. The Strategy lays out a vision for a resilient society and **identifies goals, objectives and targets** in five key systems that affect the daily lives of Canadians, including, disaster resilience, health and well-being, nature and biodiversity, infrastructure, and finally, economy and workers. For each system, the Strategy **sets a long-term transformational goal and medium-term objectives** for ensuring resilience in Canada.

Canada's 2030 Emissions Reduction Plan (2022)

The 2030 Emissions Reduction Plan is an ambitious and achievable roadmap that outlines a **sector-by-sector path for Canada to reach its emissions reduction target** of 40 percent below 2005 levels by 2030 and net-zero emissions by 2050. The Plan reflects input from over 30,000 Canadians, provinces and territories, Indigenous Peoples, industry and the independent Net-Zero Advisory Body.

Pan-Canadian Framework on Clean Growth and Climate Change

The Pan-Canadian Framework on Clean Growth and Climate Change is a **plan** – developed with the provinces and territories and in consultation with Indigenous peoples – to **meet emissions reduction targets**, grow the economy, and build resilience to a changing climate. The plan includes a pan-Canadian approach to **pricing carbon pollution**, and measures to achieve reductions across all sectors of the economy. It aims to drive **innovation and growth** by increasing technology development and adoption to ensure Canadian businesses are competitive in the global low-carbon economy. It also includes actions to advance climate change adaptation and build resilience to climate impacts across the country.

National Building Code 2020

The National Building Code of Canada (NBC) 2020, developed by the Canadian Commission on Building and Fire Codes and published by the National Research Council of Canada, sets out technical requirements for the **design and construction of new buildings**, as well as the alteration, change of use and demolition of existing buildings. **Energy performance tiers** are established to provide a framework for achieving higher levels of energy efficiency in housing and small buildings.

National Energy Code of Canada for Buildings 2020

The National Energy Code of Canada for Buildings (NECB) 2020, developed by the Canadian Commission on Building and Fire Codes with the support of Natural Resources Canada, and published by the National Research Council of Canada, sets out technical requirements for the **energy-efficient design and construction of new buildings and additions.**

Provincial, Municipal (Organized West to East)

Building Benchmark BC

Building Benchmark BC is a **voluntary benchmarking** and disclosure program designed to support property owners and managers in improving building performance. The program encourages participation from a wide range of stakeholders, including local governments, to **create a comprehensive dataset** of building performance metrics. Each year, **Building Benchmark BC releases an annual report** showcasing benchmarking results, case studies, and special features such as decarbonization forecasts. Participants benefit from competitive insights, opportunities to attract and retain tenants, and recognition for outstanding performance. The program promotes transparency through tools like the Disclosure Map, which visualizes publicly shared building data. Click here to access the Year 4 report.

B.C. Energy Step Code

The BC Energy Step Code sets performance requirements for **new construction** and groups them into **"steps."** Focuses on energy performance by setting energy efficiency performance levels, including the use of low-carbon energy systems, and providing guidance to transition to zero-carbon new buildings. The BC Energy Step Code primarily focuses on **operational energy efficiency**, targeting reductions in energy use and GHG emissions from the operation of buildings. To comply with the BC Energy Step Code, builders must use energy software modelling and on-site testing to demonstrate that both their design and the constructed building meet the requirements of the standard. They may use any materials or construction methods to do so. Any project that receives provincial funding or financing is expected to reach at least Step 3 in the BC Energy Step Code by 2030, and many municipalities are making the code a requirement for private developments as well. The following municipalities are implementing the BC Energy Step Code:

Part 9 Buildings Only:

- City of Penticton
- Village of Anmore
- District of Summerland
- Municipality of North Cowichan
- Regional District of Central Kootenay
- Village of Pemberton
- District of Highlands
- City of Rossland
- Village of Belcarra
- Village of Kaslo
- Village of Nakusp
- Village of Slocan
- Village of Golden
- City of Kimberley

Both Part 9 and Part 3 Buildings:

- City of Richmond
- City of North Vancouver
- City of Campbell River
- City of Duncan
- District of North Vancouver
- City of Victoria
- District of Saanich
- Comox Valley Regional District
- District of North Saanich
- Resort Municipality of Whistler
- District of West Vancouver
- Township of Langley
- District of Squamish
- City of New Westminster
- City of Surrey
- City of Kelowna
- City of Burnaby
- City of Vernon (now includes Part 9)
- District of Peachland
- District of Oak Bay
- District of Lake Country
- City of Nanaimo
- City of Kamloops
- District of Central Saanich
- City of Port Moody
- City of Nelson
- District of Elkford
- City of Abbotsford
- Town of Creston
- Village of New Denver
- Bowen Island Municipality
- Regional District of East Kootenay
- City of Port Coquitlam
- District of Tofino
- City of Powell River
- City of Salmon Arm
- City of Terrace
- City of Courtenay
- City of Colwood
- Town of View Royal
- Town of Comox
- City of Fernie
- District of Ucluelet
- City of Pitt Meadows
- City of Prince George
- Town of Gibsons
- District of Sechelt
- Sunshine Coast Regional District
- City of Revelstoke
- City of Castlegar
- City of Cranbrook
- Regional District of Kootenay Boundary
- City of Coquitlam
- District of Kitimat
- District of Sooke
- Regional District of Okanagan-Similkameen
- University Endowment Lands
- Regional District of Central Okanagan
- Regional District of North Okanagan
- City of Enderby
- Regional District of Fraser-Fort George
- City of Delta
- District of Coldstream
- District of Spallumcheen
- Village of Lumby
- Town of Sidney

B.C. Zero Carbon Step Code

Introduced as part of the BC Building Code, this regulation aim to limit GHG emissions for **new construction**. The Zero Carbon Step Code is a **voluntary** provincial standard for reducing emissions in new buildings. It provides several options to reduce the amount of **operational carbon emissions** from a building by requiring lower emissions from space and water heating systems. The following municipalities/local governments and First Nations reference the Zero Carbon Step Code for new construction.

- Burnaby
- Capital Regional District
- Cowichan Valley Regional District
- Central Saanich
- City of North Vancouver
- Colwood
- Courtenay
- District of North Vancouver
- District of West Vancouver Duncan
- Esquimalt
- Maple Ridge
- Metchosin
- Nanaimo
- Nelson
- City of New Westminster
- North Cowichan
- Oak Bay
- Penticton
- Port Moody
- Qualicum Beach
- Rossland
- Richmond
- Saanich
- Squamish
- Township of Langley
- Vernon
- Victoria
- View Royal
- Whistler
- Tsleil-Waututh Nation
- UBC campus and neighbourhood (Residential Environmental Assessment Program)
- University Endowment Lands (UEL) for Part 3 and Part 9 buildings

Out of the 32 local governments listed above, Whistler and Richmond, BC, have been selected for further elaboration as examples of municipalities of different sizes implementing the Step Code.

Whistler, BC implementation of the Energy Step Code and Zero Carbon Step Code

As of January 1, 2024, all new buildings in Whistler must comply with specific standards under the BC Energy Step Code and the Zero Carbon Step Code. In December 2020, Whistler adopted the Big **Moves Climate Action Strategy**, committing to achieving the highest level of the BC Energy Step Code and using low-carbon heating systems for all new buildings by 2030. As part of this initiative, the Resort Municipality of Whistler (RMOW) introduced higher steps of the Energy Step Code and the Zero Carbon Step Code, effective January 1, 2024. Whistler has established separate step code requirements for both Part 9 (residential and non-residential) and Part 3 buildings.

Richmond, BC implementation of the Energy Step Code and Zero Carbon Step Code

Richmond has incorporated updates to the BC Energy Step Code and the Zero Carbon Step Code, setting enhanced energy efficiency and GHG intensity requirements for various building types. The city has introduced Building Regulation Bylaw 7230, Amendment Bylaw 10467, to formalize these updates. This amendment emphasizes the need for new buildings to meet more stringent energy performance and GHG reduction standards. Richmond has established separate step code requirements for Part 9 buildings.

Energize Vancouver

Energize Vancouver is a multi-year initiative focused on reducing carbon from **existing commercial and multi-family buildings**. It mandates owners and managers to **measure and report energy use and GHG intensity** for buildings over 50,000 square feet, with phased deadlines starting in 2024. For office and retail assets over 100,000 square feet, performance regulations are established. By setting GHG intensity limits, the program aims for zero emissions by 2040 for office and retail buildings. Compliance mechanisms include annual reporting, mandatory operating permits starting in 2027, and adherence to the Annual Greenhouse Gas and Energy Limits By-law. Click here to access the City of Vancouver Annual Greenhouse Gas and Energy Limits By-law.

Vancouver Zero Emissions Building Plan

This Plan targets the majority of new buildings in Vancouver to have no operational GHG emissions by 2025 and a**ll new buildings to have no GHG emissions by 2030**. Stepping down emissions is addressed by incrementally lowering GHG intensity, thermal energy demand intensity and energy use intensity. Operational and embodied carbon are both included. The Zero Emissions Building Plan is the precursor to the BC Energy Step Code and the BC Zero Carbon Step Code.

City of Edmonton Building Energy Benchmarking Program

Edmonton's Building Energy Benchmarking Program improves building **energy efficiency** and contributes to significant **energy savings and GHG reduction** by providing owners with information about their building. The program supports building owners and operators to reduce energy consumption and will help them transition to the mandatory building energy labelling initiative announced by the Federal Government in the Pan Canadian Framework on Clean Growth and Climate Change.

City of Calgary Benchmark YYC

Benchmark YYC helps building owners and operators **measure, track, and disclose the year-over-year energy and emissions performance** of their buildings. This empowers them to make data-driven capital investments to improve their building **energy efficiency** and **reduce GHG emissions** while creating a baseline for designing their long-term building decarbonization strategy.

City of Winnipeg Building Energy Disclosure Project

The Building Energy Disclosure Project in Winnipeg aims to help the city achieve net-zero emissions by 2050 by encouraging building owners to **publicly share their annual energy use data**. This initiative promotes transparency and **benchmarking** through the ENERGY STAR® Portfolio Manager® tool, allowing participants to track and improve their **energy efficiency**. Benefits include a personalized energy performance scorecard, access to financial incentives, and recognition in the annual project report, all at no cost to participants. The project targets **commercial and institutional buildings** that meet specific size and occupancy requirements.

Ontario Energy and Water Reporting and Benchmarking (EWRB) Initiative

The Ontario Energy and Water Reporting and Benchmarking (EWRB) initiative requires building owners of **large properties (50,000 square feet or more)** to **annually report their energy and water usage** under the Reporting of Energy Consumption and Water Use regulation. Ontario's Energy and Water Reporting and Benchmarking (EWRB) initiative aims to help building owners and operators access accurate and reliable information about building performance. It's meant to save money by tracking usage identify energy and water efficiency opportunities compared to current energy and water usage in similar buildings. Ultimately, better managing energy consumption through improved data use, integration and analytics.

Toronto Green Standard v4

The Toronto Green Standard (TGS) is a set of sustainable **design requirements** aimed at **new developments** in Toronto. It includes various performance tiers, with **Tier 1 being mandatory** and Tiers 2 to 4 offering higher voluntary standards along with financial incentives. Its purpose is to promote sustainable site and building designs that address Toronto's urban environmental pressures: air quality, climate change and energy efficiency, water quality and efficiency, ecology and solid waste.

TransformTO Net Zero Strategy

Toronto's TransformTO climate action strategy includes a set of long-term, low-carbon goals and strategies. The Strategy identifies actions and targets to be achieved **by 2030** in key sectors, including buildings, transportation and waste. Key mechanisms to achieve this include **disclosure, code compliance, and financial incentives**. The strategy establishes a **carbon budget** for city operations and the community, with regular **emissions inventory reporting** on a two-year cycle to ensure transparency and accountability. Code compliance is enforced by setting **performance targets** for existing buildings, requiring new buildings to be near zero emissions, and implementing the Toronto Green Standard for all new developments.

City of Toronto Net Zero Existing Buildings Strategy

The Net Zero Existing Buildings Strategy, **part of the broader TransformTO initiative**, outlines a pathway to decarbonize Toronto's **existing buildings**. The Strategy represents a set of recommendations for the City to consider in reducing emissions from its building stock. Overall, it provides an overview of the challenges of **decarbonizing Toronto's existing buildings** and identifies key policies and actions necessary to achieve the City's climate targets while maximizing potential co-benefits and minimizing potential harms to owners and tenants. An update on the Net Zero Buildings Strategy can be accessed here.

City of Toronto Building Emissions Performance Standards

The City's Net Zero Existing Buildings Strategy focuses on reducing emissions from existing buildings with the ultimate target of achieving net zero emissions by 2040, and an interim target of cutting emissions nearly in half by 2030, relative to 2008 levels.

Region of Peel Net Zero Emissions New Construction Policy and Standard

The Net Zero Emissions New Construction Policy sets a framework that prioritizes green building practices and mandates specific **GHG emissions and energy performance standards** for all **new constructions** and major renovations of buildings owned by Peel Region. The policy aims to substantially **reduce carbon emissions, promote energy efficiency**, and enhance the overall environmental performance of Peel's building portfolio.

Markham Sustainability Metrics

The Markham Sustainability Metrics Program is a **green development standard** implemented by the City of Markham to evaluate and **score the sustainability performance of new developments**. This **point-based** system assigns values to various sustainability metrics, encouraging developers to achieve higher levels of sustainability in their projects.

In addition to Peel and Markham, other Ontario municipalities such as Whiby, Vaughan, Clarington, Caledon, Halton Hills, have also adopted Green Development Standards, some through voluntary points systems and others via mandatory tiered standards.

Quebec Construction Code 2020

The Quebec Construction Code outlines **standards for building safety and efficiency** across various chapters. Chapter I.1 – **Energy Efficiency of Buildings** enforces regulations on energy performance for large residential, institutional, commercial, and industrial buildings. This chapter, based on the National Energy Code for Buildings with Québec amendments, aims to enhance energy efficiency, reduce GHG emissions, and support sustainable building practices in the province.

Montreal Roadmap for zero-emissions buildings by 2040 (in French)

The Montreal Roadmap for Zero-Emissions Buildings by 2040 is a strategic initiative aimed at significantly **reducing GHG emissions** from the city's real estate sector. This initiative is part of Montreal's broader 2020-2030 Climate Plan. This roadmap outlines the steps and regulations needed to achieve **zero-emission buildings**, addressing GHG emissions from commercial, residential, and institutional properties. It includes immediate actions like the disclosure of GHG emissions and the prohibition of GHG-emitting heating appliances in new buildings. By 2030, regulations will mandate declarations of heating appliances, display of GHG performance ratings for large buildings, and gradual reductions in GHG emissions to reach **zero carbon by 2040**.

Montreal By-law concerning GHG emission disclosures and ratings of large buildings

The By-law concerning GHG emission disclosures and ratings of large buildings in Montréal aims to help the city a**chieve carbon neutrality by 2050**. The by-law requires owners of large commercial, institutional, and multi-unit residential buildings (with 2,000 metre squared or more or 25+ units) to **disclose their buildings' energy consumption** data annually by June 30. The data helps the city assess **GHG emissions** and develop **energy efficiency** programs. The by-law's implementation spanned three phases from 2022 to 2024, progressively including more buildings based on size.

Other municipalities such as Quebec City and Laval are also advancing climate strategies that include building decarbonization. However, detailed benchmarking or emissions regulations similar to Montreal's have not yet been widely implemented.

Service New Brunswick Energy Management

Service New Brunswick (SNB) Energy Management focuses on **reducing carbon impact** through **energy management** and reporting systems. The program uses the ENERGY STAR Portfolio Manager to **benchmark and monitor energy use** across **government facilities**, ensuring transparency and accountability in energy consumption and GHG emissions. Key mechanisms include regular **energy use disclosure**, adherence to energy efficiency standards, and financial incentives for implementing energy-saving measures. These initiatives align with New Brunswick's Climate Change Action Plan, supporting the province's transition to a low-carbon economy by encouraging sustainable energy practices in public sector buildings.

Efficiency Nova Scotia Energy Benchmarking

Efficiency Nova Scotia offers an **Energy Benchmarking Program** designed to help building owners in Nova Scotia **optimize energy usage**, save money, and reduce environmental impact. Using ENERGY STAR Portfolio Manager, participants can track and manage their building's energy, water, and waste consumption.